

DMSO Involvement in the Object Management Group



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February 1997

MITRE

OMG's Mission

- **Develop a single architecture, *using object technology*, for distributed application integration, guaranteeing:**
 - **reusability of components;**
 - **interoperability & portability;**
 - **basis in *commercially available software*.**

*Focus on swiftly-developed, easily usable
("off the shelf") component standards.*



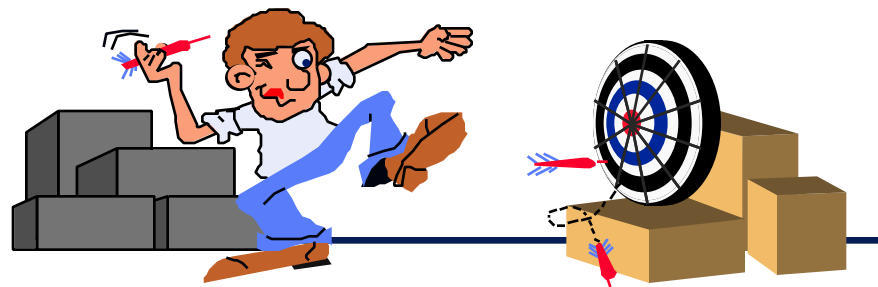
OMG: Background

- **Not-for-profit company based in United States, with representation in United Kingdom, Germany, Japan, Australia & India.**
- **Founded April 1989.**
- **Small staff (25 full time); no internal development.**
- **Sponsors *Object World* conference around the world to help spread the word.**
- **Dedicated to creating and popularizing object-oriented standards for application integration based on existing technology.**

Organization

○ Technical Plenaries have distinct roles in specification process:

- **Platform Technology Committee:** responsible for baseline “plumbing” and services.
- **Domain Technology Committee:** responsible for layered specifications in particular application domains.
- **Architecture Board:** responsible for cohesion of produced specifications.



OMG Has Chartered a Special Interest Group (SIG) for Distributed Simulation

- Idea was floated to OMG members at a previous OMG meeting and a draft charter was written.
- Prospective SIG was publicized through OMG lists and other contacts before the January meetings, and to relevant current OMG groups at the meetings.
- A working group met at the January meetings:
 - To see who showed up
 - To discuss interests, charter, and liason to other groups
 - To hear a presentation from Capt. Hollenbach
 - To hear an overview of the RTI
- Charter was revised by the working group to have a flavor broader than DoD.
- **OMG Domain Technical Committee voted at the end of the meetings to charter the SIG without dissent.**

Interest in the SIG Spans Domains and Countries

Ameritech	Booz, Allen & Hamilton, Inc.	British Telecom	Concurrent Technologies Corp.
Hewlett Packard Corp.	IBM	Integrated Systems Inc.	IsoQuantic Technologies, LLC
Lockheed Martin Adv Technology Labs	McDonnell Douglas Tng & Support Sys	Object Services and Consulting, Inc.	Objective Interface Systems
Raytheon E-Systems	Raytheon Sw. Engineering Lab	Science Applications Int'l Corp.	SiliconGraphics
The Technical Resource Connection Inc.	VISA International		Australian Artificial Intelligence Institute
Concurrent Engg. Research Center	MITRE	National Center for Manufacturing Sciences	
National Defence of Canada	US Army STRICOM	US Defense Modeling and Sim Office	US Nat'l Institute of Stds and Technology

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SIG Will Move In Several Directions

- **Gather requirements** from industry for use in applying OMG standards to distributed simulation.
- By working through other OMG organizations, seek **changes or extensions to OMG standards** to support distributed simulation.
- **Adapt current industry and government standards** for distributed simulation, such as the HLA, to influence OMG standards for distributed simulation.
- **Involve ORB and CORBA service vendors** in supporting distributed simulation.
- **Promote use of the OMA** by simulation and simulation infrastructure vendors.
- To promote **application of OMG standards** to distributed simulation over the **Internet**

DMSO Has Joined OMG as Contributing Member

- Contributing membership gives DMSO a vote in all OMG bodies.**
- DMSO is the first government agency to do so.**
- Kuhl will be DMSO's primary technical representative.**

Next SIG Meeting: Leap Aboard Several Trains

- **Technology crucial to distributed simulation is already in progress.**
 - **RFP has been issued for asynchronous messaging in CORBA.**
 - **Real-time SIG is discussing multicast support.**
- **We need to catch up with the work of other groups:**
 - **Real-time SIG**
 - **Internet SIG**
- **SIG members have asked for more technical detail on the RTI and its services.**
- **We'll discuss next steps.**

OMG Has Proposed a Workshop in CORBA and Simulation

- **The Summer Computer Simulation Conference occurs this year in Arlington, July 13-17.**
 - **Paul Kaminski is the keynote speaker.**
- **I've proposed a session at SCSC on CORBA and simulation.**
- **I've also proposed a "professional development seminar" on RTI.**
- **Abstracts are due 3/3! Please submit!**

OMG Involvement Benefits DMSO and AMG Community

- Standardization of RTI services as distributed object services increases their value.**
 - Refines the services**
 - Will make them more widely applied**
- CORBA and CORBAServices will evolve to support distributed simulation better.**
 - Focuses discussion of requirements**
 - Increases possibilities of COTS tools for implementation**